

REMARKS

Claims 1, 2, 4-45 are pending in the present application. In the Office Action mailed March 28, 2006, the Examiner rejected claims 1, 2, 4, 10, 18, 21 and 22 under 35 U.S.C. §102(b) as being anticipated by Blankenship (USP 6,331,694). The Examiner next rejected claim 35 under 35 U.S.C. §102(b) as being anticipated by either one of UK Patent Application (GB 2316244A) or Crandell (USP 6,747,246). Claims 5-9, 23-25, 33, 34, 36 and 40 are rejected under 35 U.S.C. §103(a) as being unpatentable over Blankenship. Claims 27-32 and 43-45 are rejected under 35 U.S.C. §103(a) as being unpatentable over Blankenship as applied to claims 5-9, 23-25, 33, 34, 36 and 40 above, and further in view of Blankenship et al. (USP 6,552,303). Claims 41 and 42 are rejected under 35 U.S.C. §103(a) as being unpatentable over Blankenship et al.

Claims 11-17, 19, 20, 26 and 37-39 were indicated as containing allowable subject matter. Such indication is appreciated.

The Examiner rejected claims 1 and 18 under 35 U.S.C. §102(b) as being anticipated by Blankenship (USP 6,331,694), stating that Blankenship '694 discloses all of the elements called for in the above claims and that, in particular, Blankenship '694 discloses an "energy storage device 90... that provides a first output voltage on lines 104 and 108 (note that the fuel cell based system 90 is an 'energy storage device' in the sense that it relies on the chemical energy stored in its fuel supply to provide electrical energy)." *Office Action, March 28, 2006, p. 2.*

Applicant has amended claim 1 to clarify what is being called for therein. As amended, claim 1 calls for, in part, a rechargeable energy storage device. Blankenship '694 fails to disclose such a rechargeable energy storage device. Rather, Blankenship '694 teaches the use of a fuel cell as an energy storage device in a welding-type operation. Blankenship describes the fuel cell contained therein as including a "solid polymer proton-conducting cation-exchange electrolyte membrane", whereby a non-conducting electroactive material is passed through the membrane to generate electricity.

Fuel cells of this type, by definition, are not rechargeable in that the chemical reactions used to generate electricity therein are not generally reversible. That is, in order for a spent fuel cell to generate additional power, the electroactive material contained within must be replaced. The material in a fuel cell such as the one disclosed in Blankenship cannot be recharged (i.e., the chemical reaction used to generate electricity cannot be reversed). Therefore, the rechargeable energy storage device of the current invention as set forth in claim 1 is not taught, disclosed, or suggested by the cited reference. As such, claim 1, and the claims dependent therefrom, are not disclosed, taught, or suggested by Blankenship '694.

Applicant has incorporated the subject matter of allowable claim 19 into independent claim 18. Claim 19 has furthermore been cancelled. Claim 20 has been amended to reflect its chain of dependency. Applicant respectfully believes that claim 18 is now patentably distinct over the prior art of record.

The Examiner also rejected claim 35 under 35 U.S.C. § 102(b) as being anticipated by either one of UK Patent Application GB2316244A or Crandell, III (6,747,246) stating that either one of the cited references “discloses a welding arrangement that includes a rechargeable battery.” *Office Action, March 26, 2006, p. 3*. In response to an amendment made in Applicant’s previous response, the Examiner further stated that “[t]he intended use of the rechargeable battery for use in a welding type apparatus having a fully charged output less than that required by the welding type apparatus does not impose any structural limitation on the battery being claimed that would distinguish over either one of UK Patent Application GB2316244A or Crandell, III (6,747,246).” *Id.* Applicant respectfully disagrees. The Examiner has misunderstood the language in claim 35 that calls for the battery to have a fully charged output less than that required by the welding type apparatus. The word “configured” does not imply a functional use but rather describes the structure of the element being claimed and, as in claim 35, describes the limitations on the physical operation and capability of the battery. The battery, as claimed, is limited in that it is only configured to supply a voltage up to a maximum level, which is less than that required to power the welding type apparatus. As

such, the language specifying that the claimed battery has a fully charged output less than that required by the welding type apparatus distinguishes the battery itself from those disclosed in Patent Application GB2316244A and Crandell, III. Accordingly, that which is called for in claim 35 is respectfully believed to not be anticipated by either of the prior art references.

The Examiner next rejected claims 23 and 36 under 35 U.S.C. §103(a) as being unpatentable over Blankenship (USP 6,331,694). The Examiner stated that “Blankenship (6,331,694) discloses a welding arrangement with features claimed, except for... the limitations directed to interchangeable energy storage devices.” *Office Action, supra at 4*. The Examiner then concluded that “[i]t is considered obvious that the fuel cells in Blankenship (6,331,694) are ‘interchangeable’ as claimed, since it is common engineering practice to interchange short lived components of a larger system.” *Id. at 4*.

Applicant has amended claim 36 to clarify what is being called for. As amended, claim 36 calls for, in part, an interchangeable, rechargeable energy storage device. As previously set forth, Blankenship ‘694 fails to teach, disclose, or suggest such an interchangeable, rechargeable energy storage device. As stated earlier, fuel cells such as the one disclosed in Blankenship ‘694 are not generally known to be rechargeable because the chemical reactions of the electroactive materials used to generate electricity therein are not reversible. That is, the same electroactive materials in the fuel cell cannot be “recharged” to generate additional power. Therefore, the interchangeable, rechargeable energy storage device of the current invention as set forth in claim 36 is not taught, disclosed, or suggested by the Examiner’s cited reference. As such, claim 36, and the claims dependent therefrom, are patentably distinct over Blankenship ‘694.

Regarding the rejection to claim 23, Applicant has elected to incorporate the allowable subject matter of claim 26 into independent claim 23.

The Examiner next rejected claim 41 under 35 U.S.C. §103(a) as being unpatentable over Blankenship et al ‘303 stating that “the discussion in columns 2-7 in

the patent to Blankenship et al. (6,552,303) discloses interchangeable control modules in the form of memory buttons having features claimed” and that “[t]he claims differ from Blankenship et al. (6,552,303) in calling for a socket extending from the module housing.” *Office Action, supra at 5*. The Examiner further asserts that “[t]his difference does not patentably distinguish over the prior art” because Blankenship ‘303 discusses receptacles 62-66 that receive memory buttons. While Applicant agrees with the Examiner that the sockets disclosed in the current invention do not patentably distinguish it over Blankenship ‘303, the prior art reference must teach or suggest all the claim limitations in order to support a prima facie case of obviousness. *MPEP § 2143*. Claim 41 calls for elements not disclosed, taught or suggested in Blankenship ‘303. Specifically, claim 41 calls for an interchangeable control module that includes a control circuit configured to control operation of the welding-type apparatus.

The memory buttons disclosed in Blankenship ‘303 are markedly different from the interchangeable control module of claim 41. That is, each memory button of Blankenship ‘303 includes only one specific parameter associated with operation of the welding-type device. Blankenship ‘303 further discloses that this data must be communicated to the controller of the welding-type device prior to any operation thereof. This is not what is called for in claim 41. Claim 41 calls for an interchangeable control module that includes a control circuit configured to control operation of the welding-type apparatus. The data buttons of Blankenship ‘303, the only interchangeable component thereof, are incapable of controlling operation of the welding-type apparatus as claimed. The operation of the welding-type apparatus of Blankenship ‘303 is controlled by the non-interchangeable controller 20 that is connected to the welding-type device and not the memory buttons as alleged. Conversely, the welding-type apparatus of claim 41 is actually controlled by the control circuit contained in the interchangeable control module. This configuration is not taught, disclosed or suggested in Blankenship ‘303. Accordingly, Applicant respectfully submits that claim 41, and the claims which depend therefrom, are patentably distinct over the prior art.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1, 2, 4-45.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,

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¹The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-2623. Should no proper payment be enclosed herewith, as by credit card authorization being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-2623. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extensions under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-2623. Please consider this a general authorization to charge any fee that is due in this case, if not otherwise timely paid, to Deposit Account No. 50-2623.